



**SD-3672**

**M. Sc. (Sem. III) (Biotech.) (ATKT) Examination**

**April / May - 2011**

**TBT-302 : Botany - II**

*(New Course)*

Time : 3 Hours]

[Total Marks : 100

**Instructions :**

(1)

नीचे दशांशिक निशानवाणी विगतो उत्तरवही पर अवश्य लभवी. Fillup strictly the details of signs on your answer book.	Seat No.:
Name of the Examination :	<input type="text"/>
<input type="text" value="M. Sc. (Sem. III) (Biotech.) (ATKT)"/>	<input type="text"/>
Name of the Subject :	<input type="text"/>
<input type="text" value="TBT-302 : Botany - II (New Course)"/>	<input type="text"/>
Subject Code No. : <input type="text" value="3"/> <input type="text" value="6"/> <input type="text" value="7"/> <input type="text" value="2"/>	<input type="text"/>
Section No. (1, 2,.....) : <input type="text" value="Nil"/>	<input type="text"/>
	Student's Signature

(2) Figures to the right indicate full marks of the question.

(3) Draw neat and labelled diagram wherever necessary.

1 Explain in detail any two : 18

- Discuss the role of macro-elements in plants.
- Describe the mechanism of opening and closing of stomata especially with theory of Glycolate metabolism.
- Define phloem transport and explain the theory of Dixon-Jolly and Active-passive theory.

2 Attempt any three : 18

- Evaluate the structure of Mitochondria and explain the cellular respiration.
- Explain in detail cytokinins and Ethylene as plant growth regulators.
- Describe in detail Calvin cycle.
- Define photosynthesis and explain the process of photosynthesis.

- 3 Explain in detail any two : 18
- (a) What is vernalization? Write the mechanisms and conditions of vernalization.
  - (b) Explain chlorophylls and carotenoids as a photoreceptors.
  - (c) What is stress physiology? Give brief account on salt stress.
- 4 Explain briefly any four of the following : 16
- (a) Tactic Movements
  - (b) Different Types of Wood
  - (c) Anomalous Growth in *Salvadora*
  - (d) Histogen and Tunica-Corpus Theory
  - (e) Vascular Cambium.
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